MULTIMEDIA UNIVERSITY

STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2018/2019

DBM5028 – BUSINESS FINANCE

(All sections / Groups)

8 MARCH 2019
9.00 a.m – 11.00 a.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **9** pages with 2 sections.
2. Answer **ALL** questions.
3. Answers for Section A should be shaded on the OMR form provided.
4. For Section B, write your answers in the answer booklet provided.
5. The formulae are given in the appendices.

SECTION A: MULTIPLE CHOICE QUESTIONS [30 Marks]
Each question carries 1 mark.

1. Which of the following refers to the basic areas of finance you learned in class?

   I. Business Finance.
   II. Introduction to Investment.
   III. Management Accounting.
   IV. International Accounting.

   A. I and II only.
   B. I, II and III only.
   C. II, III and IV only.
   D. I, II, III and IV.

2. Sandra Yeo works as a stockbroker in Melaka. Part of her job is to value the financial assets, risk and return of a company. Thus, Sandra's job falls into which one of the following areas of finance?

   A. Corporate finance.
   B. Financial institutions.
   C. Investment.
   D. International accounting.

3. Which of the following areas requires finance knowledge?

   I. Marketing.
   II. Accounting.
   III. Management.
   IV. Personal finance.

   A. II and III only.
   B. I, II and III only.
   C. I, II, III and IV.
   D. IV only.

4. Beruang Restaurant needs at least RM5,000 in cash for their day-to-day activities and RM5,000 to pay off the suppliers. These values is referred to as the restaurant's:

   A. Capital budgeting.
   B. Capital structure.
   C. Working capital.
   D. Net asset.

Continued...

5. Which of the below characteristic refers to corporation?

   A. Easiest to start.
   B. Income taxed once as personal income.
   C. Least regulated.
   D. Limited liabilities.

6. Who is the most suitable person that can be in charge of cost and financial accounting you learned in class?

   A. Treasurer.
   B. Controller.
   C. Third party agency.
   D. Accounting clerk.

7. Zarif Sdn. Bhd. currently plans to go public traded. They plan to gather capital in order to expand the business. Which one of the following market is most suitable for Zarif to collect the fund he needs?

   A. Financial market.
   B. Bank Negara.
   C. Night market
   D. Security commission.

8. Net working capital can be defined as _____ .

   A. the depreciated book value of a firm's fixed assets
   B. the value of a firm's current assets
   C. available cash minus current liabilities
   D. current assets minus current liabilities

9. Which one of the following statements is **CORRECT**?

   A. Shareholders' equity is the residual value of a firm.
   B. Net working capital must be a positive value.
   C. An increase in cash reduces the liquidity of a firm.
   D. Equipment is generally considered a highly liquid asset.

10. Which one of the following is included in the market value of a firm but not in the book value?

    A. Raw materials.
    B. Partially-built inventory.
    C. Tax liability.
    D. Reputation of the firm.

Continued...

11. A negative cash flow to stockholders indicates a firm _____.

A. had a negative cash flow from assets
B. had a positive cash flow to creditors
C. paid dividends that exceeded the amount of the net new equity
D. received more from selling stock than it paid out to shareholders

12. Dagangan Nexchange Berhad has total assets of RM 84,300, net working capital of RM 22,900, owner's equity of RM 38,600, and long-term debt of RM 23,900. What is the value of the current assets?

A. RM 21,600
B. RM 24,300
C. RM 38,900
D. RM 44,700

13. Edaran Berhad owes a total of RM 21,684 in taxes for this year. The taxable income is RM 71,509. If the company earns RM 100 more in income, it will owe an additional RM 36 in taxes. What is the average tax rate on income of RM 71,609?

A. 28.00 %
B. 30.33 %
C. 33.33 %
D. 34.00 %

14. HAI-O Enterprise has total assets of RM 31,300, long-term debt of RM 8,600, net fixed assets of RM 19,300, and owners' equity of RM 21,100. What is the value of the net working capital?

A. RM 9,800
B. RM 10,400
C. RM 18,900
D. RM 21,300

15. A firm has earnings before interest and taxes of RM 25,380 with a net income of RM 14,220. The taxes amounted to RM 5,400 for the year. During the year, the firm paid out RM 43,800 to pay off existing debt and then later borrowed an additional RM 24,000. What is the amount of the cash flow to creditors?

A. - RM 14,040
B. RM 19,800
C. RM 25,560
D. RM 28,440

Continued...

16. Rohani would like to invest RM5,000 today. Which of the following will increase the future value of that amount?

A. Shortening the investment time period.
B. Increasing the interest rate.
C. Decreasing the interest rate.
D. Paying simple interest rather than compound interest.

17. Four years from now, Sunder will be inheriting RM50,000 from his father. What is this inheritance worth today if he can earn 7 percent interest, compounded semi-annually?

A. RM37,970.58
B. RM38,144.76
C. RM74,497.17
D. RM43,572.11

18. Zaki invested RM3,000 today in an investment that pays 8.5 percent annual interest. Which of the following statements is **CORRECT**, assuming all interest is reinvested?

A. Zaki will earn an increasing amount of interest each and every year even if he should decide to withdraw the interest annually rather than reinvesting the interest.
B. Zaki will be earning simple interest.
C. Zaki will earn the same amount of interest each year.
D. Zaki could have the same future value and invest less than RM3,000 initially if he could earn more than 8.5 percent interest.

19. Daniel is investing his money of RM1,200 today at 7.5 percent interest so he could have RM2,400 later. The RM1,200 is referred to as the _____.

A. future value
B. true value
C. present value
D. complex value

20. You just won RM8,500 and deposited the amount into an investment account that pays 7.8 percent interest, compounded annually. How long will you have to wait until your investment is worth RM25,000?

A. 14.36 years.
B. 12.36 years.
C. 1.87 years.
D. 1.00 years.

Continued...

21. Rahimah will be receiving a bonus amount of RM6,300 next year. The process of determining how much that bonus is worth today is called _____.

A. investing
B. simplifying
C. discounting
D. compounding

22. Saloma wants to invest an amount of RM15,000 for 5 years. Which of the following rates will provide her with the largest future value?

A. 4 percent simple interest.
B. 8 percent simple interest.
C. 7 percent interest, compounded annually.
D. 8 percent interest, compounded annually.

23. Which of the following is **CORRECT**, all else held constant?

A. The future value is directly related to the interest rate.
B. The present value is inversely related to the future value.
C. The period of time is directly related to the interest rate.
D. The future value is inversely related to the period of time.

24. Which of the following represent perpetuity?

A. Housing rental payment of RM1,600 a month for 10 years.
B. Trust income of RM2,000 a year forever.
C. Furniture installment payment of RM150 a month for 36 months.
D. Retirement pay of RM1,700 a month for 15 years.

25. You just borrowed RM6,000 from your bank and agreed to repay the interest on an annual basis and the principal at the end of 6 years. What type of loan did you obtain?

A. Interest-only.
B. Amortized.
C. Perpetual.
D. Pure discount.

26. Which of the following qualifies as an annuity?

A. Monthly utilities bill.
B. Groceries purchases.
C. Car maintenance.
D. Property loan installment payment.

Continued...

27. Sujitra wants to have RM25,000 in an investment account 5 years from now. The account will pay 1.2 percent interest per month. If she saves money every month, starting one month from now, how much will she have to save each month to reach her goal?

A. RM286.90
B. RM285.45
C. RM488.14
D. RM586.90

28. Mavis pays 1.55 percent interest monthly on his credit card account. When the interest rate on that debt is expressed as if it were compounded only annually, the rate would be referred to as the _____.

A. annual percentage rate
B. effective annual rate
C. compounded rate
D. stated rate

29. Which of the following has the highest effective annual rate (EAR)?

A. 6 percent compounded annually.
B. 7 percent compounded semi-annually.
C. 8 percent compounded monthly.
D. 8 percent compounded quarterly.

30. How much money does Benjamin need to have in his savings account today if he wishes to withdraw RM15,000 per six months for 28 years? He expects to earn an average rate of return of 8 percent.

A. RM184,980.75
B. RM249,945.95
C. RM333,297.29
D. RM340,025.00

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SECTION B: STRUCTURED QUESTIONS [70 Marks]

QUESTION 1

(a) Avillion Berhad issued two different bonds. Bond M, has face value of RM 1,000 with a 10 years, 5 percent coupon bond and the bond makes annual coupon payments. Meanwhile, Bond N also has a face value of RM 1,000 with a 15 years, 12 percent coupon bond compounded semi-annually. The required return for both bonds is 10 percent. Calculate :

(i) Bond price of bond M and bond N. (9 marks)

(ii) Current yield of bond M and bond N. (6 marks)

(b) Define:

(i) Quoted bond prices (0.5 mark)
(ii) Invoice price (0.5 mark)
(iii)Par value (0.5 mark)
(iv)Yield to Maturity (1 mark)

(Total: 17.5 marks)

QUESTION 2

(a) Salman interested to invest his money in PINB Corporation in which currently the stock is selling at a price of RM10 per share. The required rate of return for the similar investment is 15 percent. The growth rate is 8 percent annually.

(i) How much would be the next annual dividend per share? (2.5 marks)

(ii) Calculate the capital gain received by Salman if he sells the stock six years from now? (4 marks)

(b) Sweet Dream Ltd has the following dividend projection growth rate: Year 1: 3 percent; Year 2: 3.5 percent; and Year 3: 4 percent. After that, the dividend growth rate constant at 7 percent. Currently, the company just paid dividend of RM1.50 per share. The investor's required rate of return for this investment is 12 percent. How much is the value of the stock's today? (11 marks)

(Total: 17.5 marks)

Continued...

QUESTION 3

Currently, the company is considering two mutually exclusive projects that its required rate of return is 15 percent. The cash flows produce by both projects as follow:

Year	Project Sintech (RM)	Project Microtech (RM)
0	-50,000	-50,000
1	30,000	35,000
2	25,000	20,000
3	20,000	25,000
4	20,000	25,000

Calculate:

(a) Net Present Value. (12 marks)

(b) Profitability Index. (4 marks)

(c) Based on both calculations in (a) and (b), which project should the company accept? Why? (1.5 mark)

(Total: 17.5 marks)

QUESTION 4

(a) List down any **four (4)** C's of Credit. (2 marks)

(b) Below are the financial information obtained from Hunny Good Berhad.

Expected Sales by month (RM)	April : 10,000, May : 12,000, June : 9,000
Beginning Accounts Receivable (RM)	4,000
Collections	Beginning Receivables + ¾ x Sales
Pays to Supplier	70% of Sales
Salaries, taxes and other expenses	15% of Sales
Major expansion planned (RM)	May : 5,000
Beginning cash balance (RM)	2,000 with minimum cash balance of 500

Based on the information provided above, construct Cash Budget for Hunny Good Berhad, which includes:

Continued...

(i) Cash Collection. (6 marks)
(ii) Cash Disbursements. (5 marks)
(iii) Net Cash Flow. (4.5 marks)

(Total: 17.5 marks)

End of Page

Appendix Formulae:

I. **The cash flow identity**
Cash flow from assets = Cash flow to creditors (bondholders)
+ Cash flow to stockholders (owners)

II. **Cash flow from assets**
Cash flow from assets = Operating cash flow
− Net capital spending
− Change in net working capital (NWC)
where
Operating cash flow = Earnings before interest and taxes (EBIT)
+ Depreciation − Taxes
Net capital spending = Ending net fixed assets − Beginning net fixed assets
+ Depreciation
Change in NWC = Ending NWC − Beginning NWC

III. **Cash flow to creditors (bondholders)**
Cash flow to creditors = Interest paid − Net new borrowing

IV. **Cash flow to stockholders (owners)**
Cash flow to stockholders = Dividends paid − Net new equity raised

I. **Symbols**
PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future
r = Interest rate, rate of return, or discount rate per period typically , but not always, one year
t = Number of periods typically , but not always, the number of years
C = Cash amount

II. **Future value of C invested at r percent per period for t periods**
$FV_t = C \times (1 + r)^t$
The term $(1 + r)^t$ is called the *future value factor.*

III. **Present value of C to be received in t periods at r percent per period**
$PV = C/(1 + r)^t$
The term $1/(1 + r)^t$ is called the *present value factor.*

IV. **The basic present value equation giving the relationship between present and future value is**
$PV = FV_t/(1 + r)^t$

I. **Symbols**
PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future at time t
r = Interest rate, rate of return, or discount rate per period—typically, but not always, one year
t = Number of periods—typically, but not always, the number of years
C = Cash amount

II. **Future value of C invested per period for t periods at r percent per period**
$FV_t = C \times [(1 + r)^t - 1]/r$
A series of identical cash flows paid for a set number of periods is called an annuity, and the term $[(1 + r)^t - 1]/r$ is called the *annuity future value factor.*

III. **Present value of C per period for t periods at r percent per period**
$PV = C \times \{1 - [1/(1 + r)^t]\}/r$
The term $\{1 - [1/(1 + r)^t]\}/r$ is called the *annuity present value factor.*

IV. **Present value of a perpetuity of C per period**
$PV = C/r$
A perpetuity has the same cash flow every period forever.

I. **Finding the value of a bond**

Bond value = $C \times [1 - 1/(1 + r)^t]/r + F/(1 + r)^t$

where

C = Coupon paid each period

r = Rate per period

t = Number of periods

F = Bond's face value

II. **Finding the yield on a bond**

Given a bond value, coupon, time to maturity, and face value, it is possible to find the implicit discount rate, or yield to maturity, by trial and error only. To do this, try different discount rates in the formula above until the calculated bond value equals the given bond value. Remember that increasing the rate *decreases* the bond value.

I. **The general case**

In general, the price today of a share of stock, P_0, is the present value of all of its future dividends, $D_1, D_2, D_3, \ldots$:

$$P_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \frac{D_3}{(1+R)^3} + \cdots$$

where R is the required return.

II. **Constant growth case**

If the dividend is constant and equal to D, then the price can be written as:

$$P_0 = \frac{D}{R}$$

If the dividend grows at a steady rate, g, then the price can be written as:

$$P_0 = \frac{D_1}{R - g}$$

This result is called the *dividend growth model.*

III. **Nonconstant Growth**

If the dividend grows steadily after t periods, then the price can be written as:

$$P_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \cdots + \frac{D_t}{(1+R)^t} + \frac{P_t}{(1+R)^t}$$

where

$$P_t = \frac{D_t \times (1+g)}{(R-g)}$$

IV. **Valuation Using Multiples**

For stocks that don't pay dividends (or have erratic dividend growth rates), we can value them using the PE ratio and/or the price-sales ratio:

P_t = Benchmark PE ratio × EPS_t

P_t = Benchmark price-sales ratio × Sales per $share_t$

V. **The required return, R, can be written as the sum of two things:**

$R = D_1/P_0 + g$

where D_1/P_0 is the *dividend yield* and g is the *capital gains yield* (which is the same thing as the growth rate in dividends for the steady growth case).

I. **Operating cycle = Inventory period + Accounts receivable period**

II. **Cash cycle = Operating cycle** $- \left[\frac{365 \text{ days}}{\left(\frac{\text{COGS}}{\text{Average accounts payable}}\right)}\right]$

III. **Inventory period** $= \frac{365 \text{ days}}{\left[\frac{\text{COGS}}{\text{Average inventory}}\right]}$

IV. **Accounts receivables period** $= \frac{365 \text{ days}}{\left[\frac{\text{Credit sales}}{\text{Average accounts receivables}}\right]}$

V. **Accounts receivable turnover** $= \frac{\text{Credit sales}}{\text{Average accounts receivable}}$

VI. **Accounts payable period** $= \frac{365 \text{ days}}{\left[\frac{\text{COGS}}{\text{Average accounts payable}}\right]}$